

SEQUENCE LISTING

<110> Wittamer, Valerie

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Detheux, Michel

Parmentier, Marc

<120> Compositions and Methods Comprising a Ligand of ChemerinR

<130> 9409/2212

<150> US 60/303,858

<151> 2001-07-09

<150> US 09/905,253

<151> 2001-07-13

<150> US 10/201,187

<151> 2001-07-23

<160> 91

<170> PatentIn version 3.2

<210> 1

<211> 1112

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gcccttgcca ttgccaacag ctgcatgaac cccattctgt atgttttcat ggtcaggact 960
tcaagaagtt caaggtggcc ctcttctctc gcctgggtcaa tgctctaagt gaagatacag 1020
gccactcttc ctaccccagc catagaagct ttaccaagat gtcaatgaat gagaggactt 1080
ctatgaatga gagggagacc ggcattgcttt ga 1112

<210> 2
<211> 371
<212> PRT
<213> Homo sapiens

<400> 2

Met Glu Asp Glu Asp Tyr Asn Thr Ser Ile Ser Tyr Gly Asp Glu Tyr
1 5 10 15

Pro Asp Tyr Leu Asp Ser Ile Val Val Leu Glu Asp Leu Ser Pro Leu
20 25 30

Glu Ala Arg Val Thr Arg Ile Phe Leu Val Val Val Tyr Ser Ile Val
35 40 45

Cys Phe Leu Gly Ile Leu Gly Asn Gly Leu Val Ile Ile Ile Ala Thr
50 55 60

Phe Lys Met Lys Lys Thr Val Asn Met Val Trp Phe Leu Asn Leu Ala
65 70 75 80

Val Ala Asp Phe Leu Phe Asn Val Phe Leu Pro Ile His Ile Thr Tyr
85 90 95

Ala Ala Met Asp Tyr His Trp Val Phe Gly Thr Ala Met Cys Lys Ile
100 105 110

Ser Asn Phe Leu Leu Ile His Asn Met Phe Thr Ser Val Phe Leu Leu
115 120 125

Thr Ile Ile Ser Ser Asp Arg Cys Ile Ser Val Leu Leu Pro Val Trp
130 135 140

Ser Gln Asn His Arg Ser Val Arg Leu Ala Tyr Met Ala Cys Met Val

145		150		155		160
Ile Trp Val Leu Ala Phe Phe Leu Ser Ser Pro Ser Leu Val Phe Arg	165		170		175	
Asp Thr Ala Asn Leu His Gly Lys Ile Ser Cys Phe Asn Asn Phe Ser	180		185		190	
Leu Ser Thr Pro Gly Ser Ser Ser Trp Pro Thr His Ser Gln Met Asp	195		200		205	
Pro Val Gly Tyr Ser Arg His Met Val Val Thr Val Thr Arg Phe Leu	210		215		220	
Cys Gly Phe Leu Val Pro Val Leu Ile Ile Thr Ala Cys Tyr Leu Thr	225		230		235	240
Ile Val Cys Lys Leu Gln Arg Asn Arg Leu Ala Lys Thr Lys Lys Pro	245		250		255	
Phe Lys Ile Ile Val Thr Ile Ile Ile Thr Phe Phe Leu Cys Trp Cys	260		265		270	
Pro Tyr His Thr Leu Asn Leu Leu Glu Leu His His Thr Ala Met Pro	275		280		285	
Gly Ser Val Phe Ser Leu Gly Leu Pro Leu Ala Thr Ala Leu Ala Ile	290		295		300	
Ala Asn Ser Cys Met Asn Pro Ile Leu Tyr Val Phe Met Gly Gln Asp	305		310		315	320
Phe Lys Lys Phe Lys Val Ala Leu Phe Ser Arg Leu Val Asn Ala Leu	325		330		335	
Ser Glu Asp Thr Gly His Ser Ser Tyr Pro Ser His Arg Ser Phe Thr	340		345		350	
Lys Met Ser Ser Met Asn Glu Arg Thr Ser Met Asn Glu Arg Glu Thr	355		360		365	
Gly Met Leu	370					

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 <213> Mus musculus

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 ctggtggtga tctacagctt ggtgtgcttc ctccgtctcc taggcaacgg cctggtgatt 180
 gtcacgcaca ccttcaagat gaagaagacc gtgaacactg tgtgggtttgt caacctggct 240
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 catcccgccc actcgcaagt agtttccaca gggtagagca gacacgtggc ggtcactgtc 660
 acccgcttcc tttgcggctt cctgatcccc gtcttcatca tcacggcctg ctaccttacc 720
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 <213> Mus musculus

<400> 4

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Ser Asp Gly Phe Gly Tyr Phe Val Asp Leu Glu Glu Ala Ser Pro Trp
 20 25 30

Glu Ala Lys Val Ala Pro Val Phe Leu Val Val Ile Tyr Ser Leu Val
 35 40 45

Cys Phe Leu Gly Leu Leu Gly Asn Gly Leu Val Ile Val Ile Ala Thr
 50 55 60

Phe Lys Met Lys Lys Thr Val Asn Thr Val Trp Phe Val Asn Leu Ala
 65 70 75 80

Val Ala Asp Phe Leu Phe Asn Ile Phe Leu Pro Met His Ile Thr Tyr
 85 90 95

Ala Ala Met Asp Tyr His Trp Val Phe Gly Lys Ala Met Cys Lys Ile
 100 105 110

Ser Asn Phe Leu Leu Ser His Asn Met Tyr Thr Ser Val Phe Leu Leu
 115 120 125

Thr Val Ile Ser Phe Asp Arg Cys Ile Ser Val Leu Leu Pro Val Trp
 130 135 140

Ser Gln Asn His Arg Ser Ile Arg Leu Ala Tyr Met Thr Cys Ser Ala
 145 150 155 160

Val Trp Val Leu Ala Phe Phe Leu Ser Ser Pro Ser Leu Val Phe Arg
 165 170 175

Asp Thr Ala Asn Ile His Gly Lys Ile Thr Cys Phe Asn Asn Phe Ser
 180 185 190

Leu Ala Ala Pro Glu Ser Ser Pro His Pro Ala His Ser Gln Val Val
 195 200 205

Ser Thr Gly Tyr Ser Arg His Val Ala Val Thr Val Thr Arg Phe Leu
 210 215 220

Cys Gly Phe Leu Ile Pro Val Phe Ile Ile Thr Ala Cys Tyr Leu Thr
 225 230 235 240

Ile Val Phe Lys Leu Gln Arg Asn Arg Leu Ala Lys Asn Lys Lys Pro
 245 250 255

Phe Lys Ile Ile Ile Thr Ile Ile Ile Thr Phe Phe Leu Cys Trp Cys
 260 265 270

Pro Tyr His Thr Leu Tyr Leu Leu Glu Leu His His Thr Ala Val Pro
 275 280 285

Ser Ser Val Phe Ser Leu Gly Leu Pro Leu Ala Thr Ala Val Ala Ile
 290 295 300

Ala Asn Ser Cys Met Asn Pro Ile Leu Tyr Val Phe Met Gly His Asp
 305 310 315 320

Phe Arg Lys Phe Lys Val Ala Leu Phe Ser Arg Leu Ala Asn Ala Leu
 325 330 335

Ser Glu Asp Thr Gly Pro Ser Ser Tyr Pro Ser His Arg Ser Phe Thr
 340 345 350

Lys Met Ser Ser Leu Asn Glu Lys Ala Ser Val Asn Glu Lys Glu Thr
 355 360 365

Ser Thr Leu
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<210> 5
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 <212> DNA
 <213> Rattus norvegicus

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 ctggtggtaa tctacagctt ggtgtgcttc ctcgggatcc taggcaatgg cctggtgatt 180
 gtcacgcgca ccttcaagat gaagaagacg gtgaacaccg tgtgggtttgt caacctggcc 240
 gtggctgact tcctgttcaa catcttcttg cccatccaca tcacctatgc cgctatggac 300
 taccactggg tggtcgggaa agccatgtgc aagattagta gctttctgct aagccacaac 360
 atgtacacca gcgtcttcct gtcactgtc atcagcttcg accgctgcat ctccgtgctc 420
 ctccccgtct ggtcccagaa ccaccgcagc gtgcgtctgg cctacatgac ctgcgtgggt 480

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 agccacggga agataacctg cttcaacaac ttcagcctgg cggcgccga gcctttctct 600
 cattccaccc acccggaac agaccggta gggtagagca gacatgtggc ggtcacgcgc 660
 acccgcttcc tctgtggctt cctgatcccc gtcttcatca tcacggcctg ttacctcacc 720
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<210> 6
 <211> 371
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 <213> Rattus norvegicus

<400> 6

Met Glu Tyr Glu Gly Tyr Asn Asp Ser Ser Ile Tyr Gly Glu Glu Tyr
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Ser Asp Gly Ser Asp Tyr Ile Val Asp Leu Glu Glu Ala Gly Pro Leu
 20 25 30

Glu Ala Lys Val Ala Glu Val Phe Leu Val Val Ile Tyr Ser Leu Val
 35 40 45

Cys Phe Leu Gly Ile Leu Gly Asn Gly Leu Val Ile Val Ile Ala Thr
 50 55 60

Phe Lys Met Lys Lys Thr Val Asn Thr Val Trp Phe Val Asn Leu Ala
 65 70 75 80

Val Ala Asp Phe Leu Phe Asn Ile Phe Leu Pro Ile His Ile Thr Tyr
 85 90 95

Ala Ala Met Asp Tyr His Trp Val Phe Gly Lys Ala Met Cys Lys Ile
 100 105 110

Ser Ser Phe Leu Leu Ser His Asn Met Tyr Thr Ser Val Phe Leu Leu
115 120 125

Thr Val Ile Ser Phe Asp Arg Cys Ile Ser Val Leu Leu Pro Val Trp
130 135 140

Ser Gln Asn His Arg Ser Val Arg Leu Ala Tyr Met Thr Cys Val Val
145 150 155 160

Val Trp Val Trp Leu Ser Ser Glu Ser Pro Pro Ser Leu Val Phe Gly
165 170 175

His Val Ser Thr Ser His Gly Lys Ile Thr Cys Phe Asn Asn Phe Ser
180 185 190

Leu Ala Ala Pro Glu Pro Phe Ser His Ser Thr His Pro Arg Thr Asp
195 200 205

Pro Val Gly Tyr Ser Arg His Val Ala Val Thr Val Thr Arg Phe Leu
210 215 220

Cys Gly Phe Leu Ile Pro Val Phe Ile Ile Thr Ala Cys Tyr Leu Thr
225 230 235 240

Ile Val Phe Lys Leu Gln Arg Asn Arg Gln Ala Lys Thr Lys Lys Pro
245 250 255

Phe Lys Ile Ile Ile Thr Ile Ile Ile Thr Phe Phe Leu Cys Trp Cys
260 265 270

Pro Tyr His Thr Leu Tyr Leu Leu Glu Leu His His Thr Ala Val Pro
275 280 285

Ala Ser Val Phe Ser Leu Gly Leu Pro Leu Ala Thr Ala Val Ala Ile
290 295 300

Ala Asn Ser Cys Met Asn Pro Ile Leu Tyr Val Phe Met Gly His Asp
305 310 315 320

Phe Lys Lys Phe Lys Val Ala Leu Phe Ser Arg Leu Val Asn Ala Leu
325 330 335

Ser Glu Asp Thr Gly Pro Ser Ser Tyr Pro Ser His Arg Ser Phe Thr
 340 345 350

Lys Met Ser Ser Leu Ile Glu Lys Ala Ser Val Asn Glu Lys Glu Thr
 355 360 365

Ser Thr Leu
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 <212> DNA
 <213> Homo sapiens

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 ccgcccgtgc agtgggcctt ccaggagacc agtgtggaga gcgccgtgga cagcccttc 180
 ccagctggaa tatttgtgag gctggaattt aagctgcagc agacaagctg ccggaagagg 240
 gactggaaga aacccgagtg caaagtcagg cccaatggga ggaaacggaa atgcctggcc 300
 tgcacaaac tgggctctga ggacaaagtt ctgggcccgt tgggccactg ccccatagag 360
 acccaagttc tgcgggagcg tgaggagcac caggagaccc agtgcctcag ggtgcagcgg 420
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 ccccgagct aa 492

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 <213> Homo sapiens

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Val Gly Val Ala Glu Leu Thr Glu Ala Gln Arg Arg Gly Leu Gln Val
 20 25 30

Ala Leu Glu Glu Phe His Lys His Pro Pro Val Gln Trp Ala Phe Gln
 35 40 45

Glu Thr Ser Val Glu Ser Ala Val Asp Thr Pro Phe Pro Ala Gly Ile
 50 55 60

Phe Val Arg Leu Glu Phe Lys Leu Gln Gln Thr Ser Cys Arg Lys Arg
 65 70 75 80

Asp Trp Lys Lys Pro Glu Cys Lys Val Arg Pro Asn Gly Arg Lys Arg
 85 90 95

Lys Cys Leu Ala Cys Ile Lys Leu Gly Ser Glu Asp Lys Val Leu Gly
 100 105 110

Arg Leu Val His Cys Pro Ile Glu Thr Gln Val Leu Arg Glu Ala Glu
 115 120 125

Glu His Gln Glu Thr Gln Cys Leu Arg Val Gln Arg Ala Gly Glu Asp
 130 135 140

Pro His Ser Phe Tyr Phe Pro Gly Gln Phe Ala Phe Ser Lys Ala Leu
 145 150 155 160

Pro Arg Ser

<210> 9
 <211> 489
 <212> DNA
 <213> Mus musculus

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 aaacaccac ctgtgcagtt ggccttccaa gagatcgggtg tggacagagc tgaagaagtg 180
 ctcttctcag ctggcacctt tgtgagggtg gaatttaagc tccagcagac caactgcccc 240
 aagaaggact ggaaaaagcc ggagtgcaca atcaaaccac acgggagaag gcggaaatgc 300
 ctggcctgca ttaaaatgga cccaagggt aaaattctag gccgatagt ccaactgccc 360
 attctgaagc aagggcctca ggatcctcag gagttgcaat gcattaagat agcacaggct 420
 ggcaagacc cccacggcta cttcctacct ggacagtttg ccttctccag ggccctgaga 480
 accaaataa 489

<210> 10
 <211> 162
 <212> PRT
 <213> Mus musculus

<400> 10

Met Lys Cys Leu Leu Ile Ser Leu Ala Leu Trp Leu Gly Thr Val Gly
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Thr Arg Gly Thr Glu Pro Glu Leu Ser Glu Thr Gln Arg Arg Ser Leu
 20 25 30

Gln Val Ala Leu Glu Glu Phe His Lys His Pro Pro Val Gln Leu Ala
 35 40 45

Phe Gln Glu Ile Gly Val Asp Arg Ala Glu Glu Val Leu Phe Ser Ala
 50 55 60

Gly Thr Phe Val Arg Leu Glu Phe Lys Leu Gln Gln Thr Asn Cys Pro
 65 70 75 80

Lys Lys Asp Trp Lys Lys Pro Glu Cys Thr Ile Lys Pro Asn Gly Arg
 85 90 95

Arg Arg Lys Cys Leu Ala Cys Ile Lys Met Asp Pro Lys Gly Lys Ile
 100 105 110

Leu Gly Arg Ile Val His Cys Pro Ile Leu Lys Gln Gly Pro Gln Asp
 115 120 125

Pro Gln Glu Leu Gln Cys Ile Lys Ile Ala Gln Ala Gly Glu Asp Pro
 130 135 140

His Gly Tyr Phe Leu Pro Gly Gln Phe Ala Phe Ser Arg Ala Leu Arg
 145 150 155 160

Thr Lys

<210> 11
 <211> 429
 <212> DNA
 <213> Homo sapiens

<400> 11

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 ccagctggaa tatttgtgag gctggaattt aagctgcagc agacaagctg ccggaagagg 180
 gactggaaga aacccgagtg caaagtcagg cccaatggga ggaaacggaa atgcctggcc 240
 tgcacaaac tgggctctga ggacaaagtt ctgggcccgt tggtcactg ccccatagag 300
 acccaagttc tgcgggaggc tgaggagcac caggagaccc agtgcctcag ggtgcagcgg 360
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 ccccgtagc 429

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 <211> 143
 <212> PRT
 <213> Homo sapiens

<400> 12

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Phe His Lys His Pro Pro Val Gln Trp Ala Phe Gln Glu Thr Ser Val
 20 25 30

Glu Ser Ala Val Asp Thr Pro Phe Pro Ala Gly Ile Phe Val Arg Leu
 35 40 45

Glu Phe Lys Leu Gln Gln Thr Ser Cys Arg Lys Arg Asp Trp Lys Lys
 50 55 60

Pro Glu Cys Lys Val Arg Pro Asn Gly Arg Lys Arg Lys Cys Leu Ala
 65 70 75 80

Cys Ile Lys Leu Gly Ser Glu Asp Lys Val Leu Gly Arg Leu Val His
 85 90 95

Cys Pro Ile Glu Thr Gln Val Leu Arg Glu Ala Glu Glu His Gln Glu
 100 105 110

Thr Gln Cys Leu Arg Val Gln Arg Ala Gly Glu Asp Pro His Ser Phe
 115 120 125

Tyr Phe Pro Gly Gln Phe Ala Phe Ser Lys Ala Leu Pro Arg Ser.

130

135

140

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 <211> 411
 <212> DNA
 <213> Homo sapiens

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 ccagctggaa tatttgtgag gctggaattt aagctgcagc agacaagctg ccggaagagg 180
 gactggaaga aacccgagtg caaagtcagg cccaatggga ggaaacggaa atgcctggcc 240
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 acccaagttc tgcgggaggc tgaggagcac caggagaccc agtgcctcag ggtgcagcgg 360
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 <213> Homo sapiens

<400> 14

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Phe His Lys His Pro Pro Val Gln Trp Ala Phe Gln Glu Thr Ser Val
 20 25 30

Glu Ser Ala Val Asp Thr Pro Phe Pro Ala Gly Ile Phe Val Arg Leu
 35 40 45

Glu Phe Lys Leu Gln Gln Thr Ser Cys Arg Lys Arg Asp Trp Lys Lys
 50 55 60

Pro Glu Cys Lys Val Arg Pro Asn Gly Arg Lys Arg Lys Cys Leu Ala
 65 70 75 80

Cys Ile Lys Leu Gly Ser Glu Asp Lys Val Leu Gly Arg Leu Val His
 85 90 95

Cys Pro Ile Glu Thr Gln Val Leu Arg Glu Ala Glu Glu His Gln Glu
 100 105 110

Thr Gln Cys Leu Arg Val Gln Arg Ala Gly Glu Asp Pro His Ser Phe
 115 120 125

Tyr Phe Pro Gly Gln Phe Ala Phe Ser
 130 135

<210> 15
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 <212> PRT
 <213> Homo sapiens

<400> 15

Lys Leu Gln Gln Thr Ser Cys Arg Lys
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<210> 16
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 <212> PRT
 <213> Homo sapiens

<400> 16

Arg Asp Trp Lys Lys Pro Glu Cys Lys Val
 1 5 10

<210> 17
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 <212> PRT
 <213> Homo sapiens

<400> 17

Arg Gly Leu Gln Val Ala Leu Glu Glu Phe His Lys His
 1 5 10

<210> 18
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 <212> PRT
 <213> Homo sapiens

<400> 18

Lys Cys Leu Ala Cys Ile Lys Leu Gly Ser Glu Asp Lys Val
 1 5 10

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<213> Homo sapiens

<400> 19

Arg Leu Val His Cys Pro Ile Glu Thr Gln Leu Val Arg Glu
1 5 10

<210> 20

<211> 14

<212> PRT

<213> Homo sapiens

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Arg Arg Gly Leu Gln Val Ala Leu Glu Glu Phe His Lys His
1 5 10

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<211> 14

<212> PRT

<213> Homo sapiens

<400> 21

Arg Glu Ala Glu Glu His Gln Glu Thr Gln Cys Leu Arg Val
1 5 10

<210> 22

<211> 19

<212> PRT

<213> Homo sapiens

<400> 22

Arg Ala Gly Glu Asp Pro His Ser Phe Tyr Phe Pro Gly Gln Phe Ala
1 5 10 15

Phe Ser Lys

<210> 23

<211> 28

<212> DNA

<213> Homo sapiens

<400> 23

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28

<210> 24

<211> 29

<212> DNA

<213> Homo sapiens
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 <210> 25
 <211> 48
 <212> DNA
 <213> Mus musculus

 <400> 25
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 <210> 26
 <211> 48
 <212> DNA
 <213> Homo sapiens

 <400> 26
 tctctcgaga aaagagagggc tgaagctggc gtcgccgagc tcacggaa 48

 <210> 27
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 <212> DNA
 <213> Homo sapiens

 <400> 27
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 <213> Mus musculus

 <400> 28
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 <210> 29
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 <213> Homo sapiens

 <400> 29
 agggaattct tagctgcggg gcagggcctt 30

 <210> 30
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 <212> DNA
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 <400> 30

caggaattcg ccatgaagtg cttgctga

28

<210> 31

<211> 28

<212> DNA

<213> Homo sapiens

<400> 31

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<210> 32

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<212> DNA

<213> Mus musculus

<400> 32

gctctagatt tggttctcag ggccctgga

29

<210> 33

<211> 29

<212> DNA

<213> Homo sapiens

<400> 33

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<210> 34

<211> 17

<212> DNA

<213> Artificial Sequence

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<223> Synthetic primer

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<221> misc_feature

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<223> Synthetic primer

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17

<210> 35

<211> 19

<212> DNA

<213> Artificial Sequence

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<223> Synthetic primer

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<222> (1)..(19)
<223> Synthetic primer

<400> 35
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19

<210> 36
<211> 23
<212> DNA
<213> Artificial Sequence

<220>
<223> Probe

<220>
<221> misc_feature
<222> (1)..(23)
<223> Synthetic probe

<400> 36
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23

<210> 37
<211> 18
<212> DNA
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<220>
<223> Synthetic primer

<220>
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<222> (1)..(18)
<223> Synthetic primer

<400> 37
gtcccagaac caccgcag

18

<210> 38
<211> 21
<212> DNA
<213> Artificial Sequence

<220>
<223> Synthetic primer

<220>
<221> misc_feature
<222> (1)..(21)

<223> Synthetic primer

<400> 38

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21

<210> 39

<211> 23

<212> DNA

<213> Artificial Sequence

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<223> Synthetic probe

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<222> (1)..(23)

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<210> 40

<211> 19

<212> DNA

<213> Artificial Sequence

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<223> Synthetic primer

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<222> (1)..(19)

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gaaggtgaag gtcggagtc

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<210> 41

<211> 20

<212> DNA

<213> Artificial Sequence

<220>

<223> Synthetic primer

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<221> misc_feature

<222> (1)..(20)

<223> Synthetic primer

<400> 41

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Ala Phe Ser

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His Gly Tyr Phe Leu Pro Gly Gln Phe Ala Phe Ser
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Tyr Phe Leu Pro Gly Gln Phe Ala Phe Ser
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Phe Leu Pro Gly Gln Phe Ala Phe Ser
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Phe Ala Phe Ser Arg Ala Leu Arg Thr Lys
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Phe Ala Phe Ser Arg
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<400> 51

Leu Arg Asn Leu Val Pro Arg Thr Glu Ser
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<211> 25
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<400> 52

Gln Arg Ala Gly Glu Asp Pro His Ser Phe Tyr Phe Pro Gly Gln Phe
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Ala Phe Ser Lys Ala Leu Pro Arg Ser
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<210> 53
<211> 19
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<400> 53

Gln Arg Ala Gly Glu Asp Pro His Ser Phe Tyr Phe Pro Gly Gln Phe
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Ala Phe Ser

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Ala Phe Ser Lys
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Ala Phe

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Ala

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<210> 58
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Pro Gly Gln Phe Ala Phe Ser
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Tyr Phe Pro Gly Gln Phe Ala Phe Ser
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<213> Homo sapiens

<400> 62

Phe Tyr Phe Pro Gly Gln Phe Ala Phe Ser
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<213> Homo sapiens

<400> 63

His Ser Phe Tyr Phe Pro Gly Gln Phe Ala Phe Ser
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Pro His Ser Phe Tyr Phe Pro Gly Gln Phe Ala Phe Ser
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<213> Homo sapiens

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Ala Phe Pro Gly Gln Phe Ala Phe Ser
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Tyr Ala Pro Gly Gln Phe Ala Phe Ser
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Tyr Phe Ala Gly Gln Phe Ala Phe Ser
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Tyr Phe Pro Gly Ala Phe Ala Phe Ser
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Tyr Phe Pro Gly Gln Ala Ala Phe Ser
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Tyr Phe Pro Gly Gln Phe Ala Ala Ser
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Tyr Phe Pro Gly Gln Phe Ala Phe Ala
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ccagctggaa tatttgtgag gctggaattt aagctgcagc agacaagctg ccggaagagg	240
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tgcacaaac tgggctctga ggacaaagtt ctgggccggt tggccactg ccccatagag	360
acccaagttc tgcgggaggc tgaggagcac caggagaccc agtgcctcag ggtgcagcgg	420
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Ala Leu Glu Glu Phe His Lys His Pro Pro Val Gln Trp Ala Phe Gln	
35 40 45	

Glu Thr Ser Val Glu Ser Ala Val Asp Thr Pro Phe Pro Ala Gly Ile	
50 55 60	

Phe Val Arg Leu Glu Phe Lys Leu Gln Gln Thr Ser Cys Arg Lys Arg
65 70 75 80

Asp Trp Lys Lys Pro Glu Cys Lys Val Arg Pro Asn Gly Arg Lys Arg
85 90 95

Lys Cys Leu Ala Cys Ile Lys Leu Gly Ser Glu Asp Lys Val Leu Gly
100 105 110

Arg Leu Val His Cys Pro Ile Glu Thr Gln Val Leu Arg Glu Ala Glu
115 120 125

Glu His Gln Glu Thr Gln Cys Leu Arg Val Gln Arg Ala Gly Glu Asp
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Pro His Ser Phe Tyr Phe Pro Gly Gln Phe Ala Phe Ser
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Gln Val Ala Leu Glu Glu Phe His Arg His Pro Pro Val Gln Trp Ala
35 40 45

Phe Gln Glu Ile Gly Val Asp Ser Ala Asp Asp Leu Phe Phe Ser Ala
50 55 60

Gly Thr Phe Val Arg Leu Glu Phe Lys Leu Gln Gln Thr Ser Cys Leu
65 70 75 80

Lys Lys Asp Trp Lys Lys Pro Glu Cys Thr Ile Lys Pro Asn Gly Arg
85 90 95

Lys Arg Lys Cys Leu Ala Cys Ile Lys Leu Asp Pro Lys Gly Lys Val
100 105 110

Leu Gly Arg Met Val His Cys Pro Ile Leu Lys Gln Gly Pro Gln Gln
115 120 125

Glu Pro Gln Glu Ser Gln Cys Ser Lys Ile Ala Gln Ala Gly Glu Asp
130 135 140

Ser Arg Ile Tyr Phe Phe Pro Gly Gln Phe Ala Phe Ser Arg Ala Leu
145 150 155 160

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<211> 163

<212> PRT

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Leu Gly Arg Ala Glu Leu Thr Ala Ala Gln Leu Arg Gly Leu Gln Val
20 25 30

Ala Leu Glu Glu Phe His Lys His Pro Pro Val Gln Trp Ala Phe Arg
 35 40 45

Glu Thr Gly Val Asn Ser Ala Met Asp Thr Pro Phe Pro Ala Gly Thr
 50 55 60

Phe Val Arg Leu Glu Phe Lys Leu Gln Gln Thr Ser Cys Arg Lys Arg
 65 70 75 80

Asp Trp Lys Lys Ala Glu Cys Lys Val Lys Pro Asn Gly Arg Lys Arg
 85 90 95

Lys Cys Leu Ala Cys Ile Lys Leu Asn Ser Glu Asp Lys Val Leu Gly
 100 105 110

Arg Met Val His Cys Pro Ile Glu Thr Gln Val Gln Arg Glu Pro Glu
 115 120 125

Glu Arg Gln Glu Ala Gln Cys Ser Arg Val Glu Arg Ala Gly Glu Asp
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Pro His Ser Tyr Tyr Phe Pro Gly Gln Phe Ala Phe Phe Lys Ala Leu
 145 150 155 160

Pro Pro Ser

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 <213> Bos taurus

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 20 25 30

Ala Leu Glu Glu Phe His Lys His Pro Pro Val Leu Trp Ala Phe Gln
 35 40 45

Val Thr Ser Val Asp Asn Ala Ala Asp Thr Leu Phe Pro Ala Gly Gln
 50 55 60

Phe Val Arg Leu Glu Phe Lys Leu Gln Gln Thr Ser Cys Arg Lys Lys
65 70 75 80

Asp Trp Arg Lys Glu Asp Cys Lys Val Lys Pro Asn Gly Arg Lys Arg
85 90 95

Lys Cys Leu Ala Cys Ile Lys Leu Asp Ser Lys Asp Gln Val Leu Gly
100 105 110

Arg Met Val His Cys Pro Ile Gln Thr Gln Val Gln Arg Glu Leu Asp
115 120 125

Asp Ala Gln Asp Ala Gln Cys Ser Arg Val Glu Arg Ala Gly Glu Asp
130 135 140

Pro His Ser Tyr Tyr Leu Pro Gly Gln Phe Ala Phe Ile Lys Ala Leu
145 150 155 160

<210> 79
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<212> PRT
<213> Gallus gallus

<400> 79

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20 25 30

Asp Val Leu Asp Tyr Phe His Ser Arg Ser Asn Val Gln Phe Leu Phe
35 40 45

Arg Glu Gln Ser Val Glu Gly Ala Val Glu Arg Val Asp Ser Ser Gly
50 55 60

Thr Phe Val Gln Leu His Leu Asn Leu Ala Gln Thr Ala Cys Arg Lys
65 70 75 80

Gln Ala Gln Arg Lys Gln Asn Cys Arg Ile Met Glu Asn Arg Arg Lys
85 90 95

Pro Val Cys Leu Ala Cys Tyr Lys Phe Asp Ser Ser Asp Val Pro Lys
 100 105 110

Val Leu Asp Lys Tyr Tyr Asn Cys Gly Pro Ser His His Leu Ala Met
 115 120 125

Lys Asp Ile Lys His Arg Asp Glu Ala Glu Cys Arg Ala Val Glu Glu
 130 135 140

Ala Gly Lys Thr Ser Asp Val Leu Tyr Leu Pro Gly Met Phe Ala Phe
 145 150 155 160

Ser Lys Gly Leu Pro
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Lys Ala Leu Pro Arg Ser
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Ala Gly Glu Asp Pro His Ser Phe Tyr Phe Pro Gly Gln Phe Ala Phe
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Ser

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Glu Asp Pro His Ser Phe Tyr Phe Pro Gly Gln Phe Ala Phe Ser
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Ser Phe Tyr Phe Pro Gly Gln Phe Ala Phe Ser
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Gly Gln Phe Ala Phe Ser

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Gln Phe Ala Phe Ser
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Tyr Phe Pro Ala Gln Phe Ala Phe Ser
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Glu Leu Thr Glu Ala Gln Arg
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Tyr His Ser Phe Phe Phe Pro Gly Gln Phe Ala Phe Ser
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